

Digital Multi-Day Maximum and Minimum Temperature Protocol

Field Guide

Task

Measure the daily maximum and minimum air temperatures for the past six days.

Measure the daily maximum and minimum soil temperatures for the past six days.

What You Need

- ☐ A properly sited instrument shelter
- ☐ A properly calibrated and installed digital multi-day max/min thermometer
- ☐ *Digital Multi-day Max/Min Thermometer Data Sheet*
- ☐ Pen or pencil
- ☐ An accurate watch or other device that tells time

In the Field

1. Maximum and minimum readings should be taken at least five minutes after your *time of reset*.
2. Open the instrument shelter and the cover flap of the digital max/min thermometer being careful not to breathe on or touch the air temperature sensor.
3. Record the time and date on your *Data Sheet* in both local and UT time. **Note:** GLOBE data entry should be UT time.
4. Turn the air temperature display of the thermometer on by pressing the air display ON button (upper left button labeled ON). **Note:** The temperature displayed will be the current air temperature.
5. Press the air sensor MAX button (middle left button labeled MAX) *twice*.
Note: The reading that appears after you press the MAX button once is the highest temperature that has occurred since the last *time of reset*, and is not for a full 24-hour period. It should not be recorded.
6. You should see the MAX symbol displayed on the digital display screen to the left of the temperature reading with the symbol D.1 displayed above. Record this temperature on your *Data Sheet*.
7. Press the air sensor MAX button again. The symbol D.2 should now be displayed in place of D.1. Record the accompanying temperature on your *Data Sheet*. Repeat this procedure to record data for as many of the past six days (D.1 – D.6) as needed.
8. To record minimum air temperatures repeat steps 5-7 pressing the air sensor MIN button (bottom left button labeled MIN) instead of the MAX button.
9. For the soil temperatures, repeat the above steps using the soil buttons on the right side and reading from the lower section of the display screen.
10. After all measurements have been taken close the cover flap of the instrument. It will shut off automatically after a short time.